

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

10/500856

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
31 July 2003 (31.07.2003)

PCT

(10) International Publication Number
WO 03/062334 A1

- (51) International Patent Classification⁷: C09D 11/10
- (74) Agents: OGILVY RENAULT et al.; Suite 1600, 1981 McGill College Avenue, Montréal, Québec H3A 2Y3 (CA).
- (21) International Application Number: PCT/CA03/00088
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: 23 January 2003 (23.01.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/350,347 24 January 2002 (24.01.2002) US
- (71) Applicant (*for all designated States except US*): BIO-MATERA INC. [CA/CA]; 6100, avenue Royalmount, Montréal, Québec H4P 2R2 (CA).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): MASARO, Laurent [CA/CA]; 3525, rue Swail, app. 12, Montréal, Québec H3T 1P5 (CA). LAPOINTE, Patrick [CA/CA]; 3475, boul. Henri-Bourassa Est, app. 302, Montréal-Nord, Québec H1H 1H8 (CA). JACQUES-GAYET, Jean-Charles [CA/CA]; 5180, Walkley, app. 5, Montréal, Québec H4V 2M5 (CA).
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: BIODEGRADABLE FLEXOGRAPHIC INK

(57) Abstract: The present invention relates to a flexographic water based ink in which a biodegradable polymer, such a polyhydroxyalkanoate (PHA), replaces conventional poorly or non-biodegradable organic polymeric resins for example. PHAs are used as a latex suspension in water, thus the present invention relates to a novel pigment/latex mixture. PHA in a latex form is a fluid vehicle in which all the other components necessary to provide a flexographic ink are added, i.e., pigments, wax and/or binder, as well as a solvent, if necessary. The PHAs are mainly responsible for the biodegradability of the flexographic water based ink. The present invention relates also a method to produce a flexographic water based composition with enhanced biodegradability properties.

WO 03/062334 A1